August 6, 2001, cyclic exposure to temperatures above 900 °C is disclosed in the specification at page 20, Tables 7 and 8. Those Tables show fibers that were subjected to repeated thermal cycling at temperatures that were above 900 °C (i.e., at 1000 °C and at 1100 °C). Support for 900 °C as a lower limit on temperature is found in the claims as originally filed. Tables 7 and 8 merely confirm that the thermal cycling occurred above this temperature.

In the Advisory Action, the Examiner asserts that Tables 7 and 8 do not exemplify 900 °C and temperatures above 1100 °C, and states that it is not clear what original claim provides support for cycling at 900 °C.

First, both Table 7 and Table 8 (each tellingly entitled "Cyclic Shrinkage") contain headings indicating the temperature to which the materials were subjected. One of these headings reads "1000 °C." The other heading reads "1100 °C." The Examiner will note that both of these temperatures are greater than 900 °C.

Second, claim 14 as filed in the Preliminary Amendment dated October 24, 2000 clearly indicated that the temperature against which the article is insulated may on occasion exceed 900 °C, and that the maximum service temperature of the insulation is greater than 900 °C. This is supported in the specification at page 4, line 2; page 6, lines 21 and 25; and Table 6. The Examiner has not previously asserted that the specification does not provide support for claims to a maximum service temperature greater than 900 °C, probably because the specification provides abundant support for this.

Applicants have shown support for 900 °C as a floor for maximum service temperature, and have shown support for repeated cycling at temperatures above this maximum service temperature. It is difficult to imagine a clearer case of establishing to one of skill in the art that Applicants had possession of the claimed subject matter as of the filing date of this application. *See In re Kaslow*, 217 USPQ 1089 (Fed. Cir. 1983).

The Examiner has also alleged that claim 23 lacks support for "3.5 hours or greater." As pointed out in the August 6, 2001 response, Figure 3 provides support for the 3.5 hour lower limit. Support for longer exposures (i.e., 24 hours) can be found elsewhere in the specification (e.g., page 8, line 1).

In the Advisory action, the Examiner asserts that Fig. 3 does not provide support for the 3.5 hour lower limit on exposure to temperatures greater than 900 °C. Applicants have enclosed a diagram that illustrates time interval A during which the material tested in Fig. 3 was exposed to temperatures above 900 °C. The Examiner can readily verify that this time period is 3.5 hours by subtracting 2 (the time when the material reached 900 °C on being heated up) from 5.5 (the time when the material reached 900 °C on cooling down). Since the 1100 °C material remained above 900 °C for an even longer period, there is support for 3.5 hours as a lower limit.

Applicants have corrected above the typographical error in the page where a 24 hour exposure is supported. Whether claim 23 encompasses more than 24 hours is irrelevant. It is not necessary for Applicants to exemplify every possible exposure time above the recited minimum. The exemplification provided in the specification is

more than sufficient to establish that a worker of skill in this art would understand Applicants to be in possession of the claimed subject matter as of the filing date of the application.

Contrary to the Examiner's assertions, the claims are fully supported by an enabling and adequate written description, and the Examiner's rejection should be withdrawn.

II. ANTICIPATION AND OBVIOUSNESS REJECTIONS

In paragraph 4 of the Office action, the Examiner has rejected claims 14-23 under 35 U.S.C. § 102(b) as anticipated by, or under 35 U.S.C. § 103(a) as obvious over, Olds et al. (U.S. Patent No. 5,322,699 or WO 87/05007) or Karppinen et al. Applicants respectfully traverse these rejections and request reconsideration and withdrawal thereof.

The Examiner asserts that, despite the failure of the cited references to teach methods of insulating articles against repeated exposure to temperatures exceeding 900 °C, the claims are anticipated or rendered obvious because the process steps recited therein are not "an active process step requiring exposure at 900 °C or greater."

Applicants reiterate the arguments made in the response filed August 6, 2001. Absent some teaching in the cited references that the insulation disclosed therein is disposed on or near articles that will be subjected to the thermal cycling recited in the claims, there is no anticipation. It is inappropriate and improper for the Examiner to simply read out of the claim the recited requirement that the articles being insulated

will be subject to repeated exposure to temperatures of 900 °C or greater, and then allege that since both the cited reference and the (now modified by the Examiner) claim dispose insulation on or around articles, the claim is anticipated or rendered obvious.

The approach taken by the Examiner, together with the language employed in addressing Applicants' arguments, indicates that the Examiner may have some concern with the definiteness of Applicants' claims (but apparently not enough concern to justify making a separate rejection under 35 U.S.C. § 112, second paragraph and making the current Office action non-final). The claims are directed to a method for insulating an article. The claims recite the type of thermal exposure which the article is insulated against – a perfectly reasonable limitation in a claim to a method for insulating, and one not shown or suggested in the cited art. The claims also recite a positive process step: disposing the insulation on, in, near, or around the article requiring the insulation, and that will be subjected to the recited thermal cycling. Again, this is completely reasonable to recite in a claim to a method for insulating, and is not taught or suggested in the cited art.

It is not necessary for Applicants to recite a step of exposing the insulated article to thermal cycling. It is sufficient for the claims to recite merely that the article will be so exposed, because the cited art does not disclose insulating such an article.

Further, the Examiner's allegation that the level of resistance required is not quantified is clearly incorrect. The claims specify the maximum service temperature

of the insulation and its maximum shrinkage level. As the Examiner is doubtless aware, materials exposed to the type of heating and thermal cycling recited in the claims are generally refractory materials that must not shrink unduly, or high temperature gases will damage the underlying surfaces of the article.

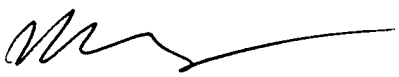
Finally, the Examiner's comments regarding the identity of properties of identical chemical compositions is inapposite. Applicants are not claiming the compositions. They are claiming new methods of use. By the Examiner's reasoning, there could never be patent coverage for new uses for old compounds or compositions. The existence of myriad patents of this nature shows the Examiner's reasoning to be incorrect.

The claims are clear and definite, in the sense that a worker of skill in the art would readily be able to determine whether a particular method of insulating an article falls within the scope of the claims. Moreover, the recited limitations are not taught or suggested in any of the art cited by the Examiner.

Applicants submit that the present claims are in condition for immediate allowance, and an early notification to that effect is earnestly solicited. If the Examiner has any questions or if any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned at 404.815.6218 to discuss said issues.

The Commissioner is authorized to charge any fees that may be due or credit any overpayment to Deposit Account No. 11-0855.

Respectfully submitted,



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